

\* Corresponding author:

E-mail address: [kfarris@umich.edu](mailto:kfarris@umich.edu) (K.B. Farris).

**Background:** Professionalism may be different over time, as it is somewhat dependent on cultural norms. The purpose was to describe the perceptions of professionalism among individuals from all communities in a college of pharmacy in the midwestern United States. A secondary objective was for students in a research course to develop and analyze a survey.

**Methods:** We developed a 36-item survey including 8 scenarios based upon professionalism concepts such as integrity and dependability. The census of the college was sent an online survey, and potential respondents included students (BS, PharmD, MS, PhD), staff, and faculty. The survey contained demographic questions and 3 questions for 8 scenarios. Three scenarios also included open-ended questions. The extent to which the behavior in the scenario was unprofessional to professional (5-point scale), frequency of observing/doing the behavior (none to always), and confidence to perform behavior or learn from situation (not confident to fully confident) were assessed. Descriptive statistics were calculated, and the scenarios will be analyzed by type of respondent.

**Results:** To date, 137 of 794 have responded. Respondents were on average 34.7 (standard deviation 12.6) years of age, 72.4% female, and BS/PharmD students were 30.7%, graduate students were 20.4%, staff were 27.7% and faculty were 21.2% of respondents. The scenario of Failing to cite use of ChatGPT showed the lowest average unprofessional rating (1.53, std 1.0) and scenario of Getting to know colleagues from another culture (4.74, std 0.65) showed the highest average professional rating. A statistically significant difference by type of respondent was shown for Failing to cite ChatGPT ( $p=0.049$ ), with faculty finding this most unprofessional and students finding it less unprofessional.

**Conclusions:** Professionalism in a midwestern pharmacy school was determined across 8 scenarios. Additional analyses will explore differences across all scenarios by type of respondent and mixed methods integration will be done for three scenarios.

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#### Abstract 114

##### Differences in vaccination hesitancy between the native and ethnic minority populations: A questionnaire survey in Denmark

Kamal Dhafer Hussein Alansari<sup>1</sup>, Caroline Buhl<sup>1</sup>, Ramune Jacobsen<sup>1,\*</sup>

<sup>1</sup> Department of Pharmacy, University of Copenhagen, Denmark

\* Corresponding author:

E-mail address: [ramune.jacobsen@sund.ku.dk](mailto:ramune.jacobsen@sund.ku.dk) (R. Jacobsen).

**Background:** In Denmark, COVID-19 vaccination coverage was lower in areas with many residents from ethnic minority backgrounds. This study aimed to investigate vaccination hesitancy among the native and Arabic minority populations in Denmark.

**Methods:** A cross-sectional questionnaire survey was conducted, utilizing validated versions of the Danish and Arabic translations of the Vaccination Attitudes Examination (VAX) scale, which in this study referred separately to COVID-19 and all other vaccines. The VAX scale includes four subscales addressing: 1) mistrust of vaccine benefits, 2) concerns about unforeseen future effects, 3) worries about commercial profiteering, and 4) preference for natural immunity. Participants express their level of agreement using a 6-point Likert scale, where higher scores indicate more hesitancy. Data were collected in January 2023 through selected Facebook groups using an online survey system. Descriptive and multivariate linear regression analyses (the latter with attitude scores as outcome variables and ethnicity alongside sociodemographic variables as covariates) were performed.

**Results:** Out of a total of 124 respondents, 35% were of Danish, 51% of Arabic and 14% of other ethnic heritage; 56% were females, 83% were fully vaccinated. Danish respondents were younger than Arabic (mean age, respectively, 35 vs. 48 years,  $p<0.001$ ). Hesitancy toward both COVID-19 and all other vaccines was higher among Arabic respondents compared to Danish. The mean overall score for COVID-19 VAX was, respectively, 2.1 vs. 3.4 (adjusted  $p<0.001$ ); the mean overall score for all other vaccines' VAX was, respectively, 2.0 vs. 3.1 (adjusted  $p<0.001$ ). In all groups, the highest scores concerned unforeseen future events, the lowest scores were related to concerns about commercial profiteering.

**Conclusions:** There is greater hesitancy towards vaccination among the Arabic

minority compared to the native population in Denmark, which may partly explain variations in COVID-19 vaccination coverage. More efforts are needed to understand and address negative vaccination attitudes among ethnic minorities in Denmark.

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#### Abstract 104

##### MedSMART Adventures in PharmaCity Game: Youth Experiences and Recommendation for Use in Opioid Safety Education

Olufunmilola Abraham<sup>1,\*</sup>, Courtney Koeberl<sup>1</sup>, Tyler McCarthy<sup>1</sup>

<sup>1</sup> Social & Administrative Sciences Division, School of Pharmacy, University of Wisconsin-Madison

\* Corresponding author:

E-mail address: [olufunmilola.abraham@wisc.edu](mailto:olufunmilola.abraham@wisc.edu) (O. Abraham).

**Background:** Adolescents are often excluded from the creation of opioid safety interventions; therefore, it is crucial to design evidence-based interventions tailored for and with youth. Video games are ubiquitous and approachable to adolescents making them an accessible educational modality. MedSMART: Adventures in PharmaCity is a serious game that educates adolescents and their families on the safe, appropriate, and responsible use of opioid prescriptions.

**Methods:** The first objective of the study was to elucidate adolescents' experiences and perceptions of the game. The second objective was to elicit their recommendations for use and suggestions for improvement. Adolescents were recruited through Qualtrics research panels, social media, listservs, and snowball sampling. Recruitment occurred between April 2021 and October 2021. Eligible adolescents played the game and completed a follow-up virtual semi-structured interview with a study team member. Interviews were transcribed verbatim and uploaded to NVivo for data analysis. A thematic content analysis was performed. A total of seventy-two adolescents participated.

**Results:** Analysis yielded four themes: prior gaming experience, educational salience, game design impressions, and recommendations for improvement. Most adolescents approached MedSMART with prior gaming experience. The youth correctly identified the game's intended objective: the promotion of opioid medication safety. Adolescents had overwhelmingly positive impressions of the game's levels, characters, and graphics. Study participants suggested expanded game levels, improved controls, and more instructions for gameplay.

**Conclusions:** The overall findings from the study demonstrate that an overwhelming number of adolescent participants favored using MedSMART as an educational tool to prepare adolescents for real-world scenarios involving opioids and other medications. Opioid hospitalizations and mortality may be prevented by tailoring drug safety education to a platform which adolescents will enjoy. The youth reported the MedSMART serious game as being acceptable, useful, enjoyable, and educational.

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#### Abstract 111

##### Consumer Likelihood to Seek Information: OTC Medicines

Jeff Taylor<sup>1</sup>

<sup>1</sup> College of Pharmacy, University of Saskatchewan, Saskatoon SK Canada

E-mail address: [jeff.taylor@usask.ca](mailto:jeff.taylor@usask.ca).

**Background:** There is continuing uncertainty in whether the public use OTC medicines with the due diligence they require. Given the fact they are accessible without a prescription, there are some who feel these medicines are very low, or even without, risk. Objective. The objective was to quantify the likelihood people would seek information on OTC medicines, in relation to 10 non-drug products. This was done as a proxy measure for the importance consumers place on them. **Methods:** Citizens of one Canadian province estimated the likelihood (scale of 1 to 10) they would search for information when considering a purchase. The survey had two lists – a MIXED products list (five OTC medicine categories and 10 non-drug products) and an OTC MEDICINES list (15 categories).

**Results:** Five hundred and seventy-five surveys were obtained (response rate 19.2 percent). The average age was 63.0 years, 61.6 percent were female, while the education level of respondents was particularly high. The mean search likelihood for the 15 products on the MIXED list ranged from 2.2 to 7.4. There